Abstract Submitted
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Reconciling "Frozen Star" and "Point Singularity" Models of Black Holes. EMMETT REDD, Missouri State University — Kevin S. Brown[1] gives a good discussion of the formation and growth of black holes (BH). However, he does not reconcile the "frozen star" (corresponding to the "field interpretation" of Weinberg) and the "point singularity" ("geometric interpretation" of Misner/Thorne/Wheeler) models. His main concern is "there is no known mechanism for" a frozen star's mass to "have been pushed *outward*". However, no push is required because all event horizons (little ones, big ones, or growing ones) are at the same potential energy level. He correctly claims that the BH's mass "is in two places (both inside and outside the event horizon) at the same coordinate time," and that the event horizons are surfaces of future null infinity. These three facts reconcile the models and leads to more satisfactory answer to how gravity gets out of a BH, i.e., it does not have to get out; it exists outside the event horizon until future null infinity. And, at the same coordinate time, it is at the point singularity, creating the event horizon. 1. http://www.mathpages.com/rr/s7-02/7-02.htm.

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